



# UNITED STATES PATENT AND TRADEMARK OFFICE

(S)

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,731	11/06/2001	Merle R. Beghtel	SVL920010072US1	9148
24852	7590	05/27/2005	EXAMINER	
INTERNATIONAL BUSINESS MACHINES CORP			ALI, SYED J	
IP LAW			ART UNIT	PAPER NUMBER
555 BAILEY AVENUE , J46/G4				2195
SAN JOSE, CA 95141				

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/005,731	BEGHTEL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Syed J. Ali	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 November 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 November 2001 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>Nov. 6, 2001</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. Claims 1-22 are pending in this application.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et al. (USPN 6,148,322) (hereinafter Sand) in view of Reznak (USPN 6,601,083).**

4. As per claim 1, Sand teaches the invention as claimed, including a method for self-throttling the use of computer resources by a computer task executing on a computer system, said method comprising:

receiving by said computer task a throttle specification for directing said computer task's usage of said computer resources (col. 4 lines 18-21, 43-47);  
executing said computer task until a first unit of work is completed, said computer task comprising said first unit of work and at least a second unit of work (col. 2 lines 47-52);  
calculating the elapsed time of said first unit of work (col. 4 lines 41-43);  
calculating a suspension time for said computer task (col. 4 lines 52-54); and

suspending said computer task for said calculated suspension time prior to resuming execution of said computer task (col. 4 lines 43-47, 52-54), whereby other computing tasks within said computer system gain access to said computer resources during said suspension of said computer task (col. 4 lines 47-50).

5. Reznak teaches the invention as claimed, including calculating a suspension time a computer task based at least partially on a throttle specification and an elapsed time (col. 4 lines 5-9, 22-26, 34-39; col. 5 lines 61-64; col. 6 lines 10-20; col. 7 lines 9-13).

6. Sand discusses at length the benefits of ensuring that one task does not monopolize a resource, and provides a remedy by suspending a task that has overrun its allocated time period. However, the length of time that the task is suspended is left in very vague terms (col. 4 lines 52-54, "execution...will not be resumed until a user-selected deactivation time elapses.") Thus, there exists a need for establishing a reasonable limit to the suspension time, such that high-priority tasks are not deactivated indefinitely or for too short a period of time. Reznak provides such a calculation, considering factors such as the percentage of a resource allocated to the task. However, Reznak is wholly concerned with the ratio of memory utilized by a task, not the amount of time that the task has been executing. Nonetheless, it would have been obvious to one of ordinary skill in the art to combine Sand and Reznak since the concepts provided by Reznak suggest that there are innumerable ways to calculate the suspension time, by indicating some of the factors that are significant in the calculation.

7. As per claim 2, Sand teaches the invention as claimed, including the method of claim 1 further comprising resuming execution of said computer task and commencing said second unit of work following the exhaustion of said suspension time (col. 4 lines 52-54).

8. As per claim 3, Reznak teaches the invention as claimed, including the method of claim 2 wherein said computer task performs a database reorganization (col. 2 line 66 - col. 3 line 2).

9. As per claim 4, Reznak teaches the invention as claimed, including the method of claim 3 wherein said database is an IMS HALDB database (col. 2 line 66 - col. 3 line 2; any type of task, database, etc. is an obvious modification).

10. As per claim 5, Reznak teaches the invention as claimed, including the method of claim 1 wherein said throttle specification is a percentage value, said percentage value representing the percentage of said computer resources on said computer system to be dedicated to said computer task (col. 4 lines 22-26, 34-39; col. 6 lines 14-20).

11. As per claim 6, Reznak teaches the invention as claimed, including the method wherein said suspension time is calculated by using the formula  $st = (et * (100 - pv)) / pv$ , where  $st$  is said suspension time,  $et$  is said elapsed time and  $pv$  is said percentage value (col. 4 lines 5-9; col. 5 lines 61-64; col. 6 lines 10-13; col. 7 lines 9-13).

Art Unit: 2195

12. As per claim 7, Sand teaches the invention as claimed, including the method of claim 1 wherein said computer task self-throttles the usage of said computer resources by said computer task in accordance with said throttle specification (col. 4 lines 18-21, 43-47).

13. As per claim 8, Sand teaches the invention as claimed, including a method for throttling the use of computer resources on a computer system during a database reorganization process comprising:

utilizing a throttle specification (col. 4 lines 18-21, 43-47);

invoking said database reorganization process and providing said throttle specification wherein said percentage is passed to a self-throttled computing task in said throttle specification (col. 2 lines 47-52); and

prior to receiving notification that said database reorganization process is complete, initiating a transaction on said computer system wherein said transaction completes within a predetermined response time objective (col. 2 lines 47-52).

14. Reznak teaches the invention as claimed, including establishing a percentage of said computer resources on said computer system to be used for said database reorganization process (col. 4 lines 22-26, 34-39; col. 6 lines 14-20); and

utilizing said percentage in a throttle specification (col. 4 lines 5-9; col. 5 lines 61-64; col. 6 lines 10-13; col. 7 lines 9-13).

Art Unit: 2195

15. As per claims 9-15, Sand teaches the invention as claimed, including an article of manufacture for use in a computer system tangibly embodying computer instructions executable by said computer system to perform the method of claims 1-7, respectively (Fig. 1).

16. As per claims 16-22, Sand teaches the invention as claimed, including a computer system for self-throttling the use of computer resources by a computer task executing on said computer system, said computer system comprising:

a computer (Fig. 1); and

computer program instructions for performing the method of claims 1-7, respectively (Fig. 1 element 1).

### *Conclusion*

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed J. Ali whose telephone number is (571) 272-3769. The examiner can normally be reached on Mon-Fri 8-5:30, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai T. An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2195

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Syed Ali  
May 19, 2005



MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100